a3 cont.

generator stator core associated with transient faults that occur during operation. This configuration still further advantageously compensates for tangential and radial forces encountered by the power generation system when the generator stator core experiences the "oval mode" condition. By relieving vibration and eliminating lateral movement of the generator stator core and by further stabilizing the power generation system, a smaller and more efficient generator stator core frame support member is provided. The present invention relieves vibration and prevents lateral movement of the generator stator core by providing a plurality of connections between the generator stator core and the stator core frame support member along medial side portions of the generator stator core. The power generation system is further stabilized by eliminating a support contact between a bottom portion of the generator stator core and the stator core frame support. The power generation system is still further stabilized by eliminating a support contact between a top portion of the generator stator core and the stator core frame support. These configurations of the power generation system advantageously eliminate lateral force components associated with transient faults, reduces vibratory forces associated with operation of the generator stator core, stabilizes the power generation system, and further advantageously reduces costs and time associated with providing a support frame for a high voltage generator stator core. These configurations of the power generation system also advantageously compensate for temporary deformations of the power generation stator core when the generator stator core experiences an "oval mode" condition during operation.

The paragraph beginning at page 6, line 33 has been amended as follows:

a2 cont.

The present invention still further provides a generator stator core support apparatus for stabilizing a power generation system and for relieving vibration and eliminating lateral movement of the generator stator core during operation. The generator stator core support apparatus preferably includes first core connecting means for connecting the generator stator core to a stator core frame support when the generator stator core is positioned to overlie lower inner surface portions of the stator core frame support. The first core connecting means is positioned to contact a first outer peripheral medial side portion of the generator stator core and to contact a first upper medial side portion of the stator core frame support. The generator stator core support apparatus also includes second core connecting means for connecting the generator stator core to the stator core frame support. The second core connecting means is positioned to contact a second outer peripheral medial side portion of the generator stator core. The second outer peripheral medial side portion is positioned opposite the first outer peripheral medial side portion of the generator stator core. The second core connecting means is further positioned to contact a second upper medial side portion of the stator core frame support. The second medial side portion of the stator core frame support is positioned opposite the first medial side portion of the stator core frame support. The combination of the first and second core connecting means connects portions of the generator stator core to portions of the stator core frame support to thereby stabilize the power generation system and relieve vibration and prevent lateral movement of the generator stator core during operation. The combination of

a2 cont.

the first and second core connecting means is further positioned to support the generator stator core when connected thereto without a support contact between a lower end portion of the generator stator core and the lower inner surface portions of the stator core frame support or a support contact between an upper end portion of the generator stator core and the inner surface portions of the stator core frame support. There is no longer a stiff support between the generator stator core and the stator core frame support when the connecting support is eliminated between the lower end portion or the upper end portion of the generator stator core and the stator core frame support. By providing an interstitial space between the upper and lower end portions of the generator stator core and the inner surface portions of the stator core frame support, lateral forces associated with transient faults that occur during operation of the generator stator core are eliminated. This interstitial space also relieves vibration of the generator stator core during operation and compensates for temporary deformations that produce tangential and radial forces encountered by the generator stator core while experiencing an "oval mode" condition during operation. By relieving vibration, eliminating lateral movement, stabilizing the power generation system and compensating for the "oval mode" condition, the present invention advantageously decreases the load from the generator stator core to the stator core frame support. The decreased load allows for a smaller and more efficient stator core frame support. A smaller frame advantageously provides a shorter load path along which the load from the generator stator core to the stator core frame support must travel. This configuration further advantageously reduces costs and time associated with

a3 cont'd. providing a support frame for a high voltage generator stator core thereby providing an efficient stator core frame support.

In the Claims:

Please amend Claims 1-3 as follows:

a3 cont.

1. (Amended) A power generation system comprising:

a stator core frame support member having a lower inner surface portion and a lower outer surface portion, the lower outer surface portion positioned to contact a support surface;

a generator stator core including a plurality of longitudinally extending keybars spaced-apart along outer peripheral portions of the generator stator core, the generator stator core positioned to overlie the lower inner surface portion of the stator core frame support member and further having a lower end portion positioned spaced-apart from and not in contact with bottom portions of the lower inner surface portion of the frame support member; and

a core supporter connected to the stator core frame support member and positioned to contact the plurality of keybars along outer side peripheries of the generator stator core, the core supporter having first and second core connecting means for connecting the stator core frame support member to the generator stator core to thereby relieve vibration and prevent lateral movement of the generator stator core, and further stabilize the power generation system during operation, the first core connecting means being connected to a first medial side outer peripheral portion of the generator stator core and the second core connecting means being connected to a second medial side outer peripheral portion of the generator stator core and positioned opposite the first

a3 amdd

medial side outer peripheral portion of the generator stator core so that the first and second core connecting means are positioned substantially symmetric about opposite medial side portions of the generator stator core.

2. (Amended) The power generation system as defined in Claim 1, wherein the generator stator core has a substantially annular shape, the stator core frame support member has a substantially semi-annular shape, and the plurality of keybars further comprises less than eight keybars.

3. (Amended) The power generation system as defined in Claim 1, wherein the plurality of keybars comprise at least two keybars positioned spaced-apart along a first outer peripheral side portion of the generator stator core, and further comprising at least another two keybars positioned spaced-apart along a second side outer peripheral side portion of the generator stator core, the second outer peripheral side portion of the generator stator core positioned opposite from and symmetric to the first outer peripheral side portion of the generator stator core.

Please cancel Claims 10-29 without prejudice to Applicant's to file a continuation directed to the subject matter thereof.

Please add the following new Claims 30-38.

a4

30. A power generation system comprising:

a stator core frame support member having a lower inner surface portion and a lower outer surface portion in contact with a support surface;

a generator stator core comprising a plurality of longitudinally extending keybars spaced-apart along outer peripheral portions of the generator stator core, and a lower portion spaced-apart from and not in contact with the lower inner surface portion of said frame support member; and

first and second core connectors connected to said stator core frame support member to contact adjacent keybars along respective first and second opposing side peripheries of said generator stator core.

31. A power generation system as defined in Claim 30 wherein the generator stator core has a substantially annular shape, the lower inner surface portion of the stator core frame support member has a substantially semi-annular shape, and the plurality of keybars further comprise less than eight keybars.

32. A power generation system as defined in Claim 30 wherein the plurality of keybars comprises at least two spaced-apart keybars along the first peripheral side portion of the generator stator core and at least another two spaced-apart keybars along the second peripheral side portion of the generator stator core.

33. A power generation system as defined in Claim 30 wherein the first and second core connectors contact less than all of the keybars along the respective first and second side peripheries of the generator stator core.

a4 cont.

34. A power generation system as defined in Claim 33 wherein the first core connector extends substantially parallel to the second core connector substantially the entire length of the generator stator core, and wherein each of the first and second core connectors further comprises at least one biasing support member with the generator stator core.

35. A power generation system as defined in Claim 34 wherein the at least one biasing support member further comprises an elongate spring bar and a plurality of spaced-apart bracket spring assemblies connected thereto, each of said plurality of bracket spring assemblies comprising a spring mounting frame and a plurality of spaced-apart key block brackets connected thereto.

36. A power generation system as defined in Claim 35 wherein the plurality of key block brackets further comprise first and second key block brackets, and wherein the first key block bracket comprises a first key block and the second key block bracket comprises a second key block, and wherein the first key block bracket is connected to a first end portion of the spring mounting frame and the second key block bracket is connected to a second end portion of the spring mounting frame, opposite the first end portion of the spring mounting frame.

37. A power generation system as defined in Claim 36 wherein one of the plurality of key blocks is connected to one of the plurality of keybars along the peripheral portions of the generator stator core, each one of the plurality of key blocks connecting to the generator stator core.